USEPA Risk Assessor, Brian Sanchez, comments on the Phase II SAP
Received via e-mail
Columbia Falls Aluminum Company Superfund Site
Columbia Falls, Montana
Prepared for Columbia Falls Aluminum Company, LLC
Prepared by Roux
Dated February 28, 2018

Responses Prepared for Columbia Falls Aluminum Company, LLC by Roux
Dated April 25, 2018
Roux responses in blue

Section 4.1, last sentence of 2nd paragraph: "…WP and BERA WP, the sampling design proposed for the Phase II Site Characterization includes a minimum of 8 to 10 observations (and most of the time more than 10) for each matrix evaluated in the exposure analysis." What are considered as the 8-10 "observations"? Is this 8-10 analytical values for each compound for each matrix at each site? 8-10 samples per exposure unit? Some clarification here would help.

The 8-10 "observations" refers to the number of sample locations and their associated analyses that will generate COPC/COPEC concentration values for use in calculating exposure point concentrations (EPCs) based on the upper confidence limit of the mean (UCL_{mean}). In each exposure area identified in the draft BHHRA WP and BERA WP, samples for laboratory analysis will be collected from a minimum of 8 to 10 sample locations for each media being evaluated (e.g., soil, surface water, porewater, sediment).

Table 5: Total TAL Metals are included here, but not Dissolved TAL Metals. The inclusion of dissolved metals is referred to in Table 1 and in the text. Suggest including it in Table 5 as well.

Table 5 will be revised to include Dissolved TAL Metals.

Table 10: I don't believe that we will use groundwater data to evaluate ecological risk. This table may not be necessary.

Groundwater data from samples collected in the upper hydrogeologic unit from downgradient, perimeter wells adjacent to the Flathead River were evaluated relative to surface water ecological screening values (ESVs) in the preliminary problem formulation presented in the BERA Work Plan to evaluate the potential groundwater-to-surface water pathway to the Flathead River. Constituents measured in groundwater at concentrations exceeding surface water ESVs were identified for further evaluation as sediment and surface water COPECs.

Consistent with the BERA Work Plan, groundwater data will be evaluated to identify COPECs that may be present along the potential groundwater-sediment-surface water migration pathway to the Flathead River. However, as indicated by the above comment, ecological exposure will be evaluated in the BERA based on EPCs calculated from the direct analysis of COPEC concentrations in surface water and sediment samples collected over multiple sampling events in the Flathead River. Table 10 will be retained in the Phase II SAP to support the evaluation of groundwater data along the potential groundwater-sediment-surface water migration pathway.